This listing of claims will replace all prior versions and listings of claims in the application.

Listing of Claims

- 1.–27. (Cancelled)
- 28. (Previously presented) A method of forming a semiconductor structure, the method comprising: providing a strained semiconductor layer; providing a SiGe layer over said strained semiconductor layer; and selectively removing said SiGe layer to expose said strained semiconductor layer.
- 29. (Previously presented) The method of claim 28, wherein said strained semiconductor layer comprises Si, Ge, or GaAs.
- 30. (Previously presented) The method of claim 28, further comprising, before the step of providing a strained semiconductor layer, providing a relaxed semiconductor layer beneath said strained semiconductor layer.
- 31. (Previously presented) The method of claim 30, wherein said relaxed semiconductor layer comprises Si or Ge.
- 32. (Previously presented) The method of claim 28, wherein said strained semiconductor layer is disposed over a semiconductor substrate.
- 33. (Previously presented) The method of claim 32, wherein said semiconductor substrate comprises Si.
- 34. (Previously presented) The method of claim 32 wherein said semiconductor substrate comprises an insulator layer.
- 35. (Previously presented) The method of claim 34, wherein said insulator layer comprises silicon dioxide.
- 36. (Previously presented) The method of claim 28, wherein said step of selectively removing said SiGe layer comprises thermal oxidation.
- 37. (Previously presented) The method of claim 36, wherein said thermal oxidation is performed at or below a temperature of approximately 850°C.

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- 38. (Previously presented) The method of claim 36, wherein said thermal oxidation is performed at a temperature at or below approximately 700°C.
- 39. (Previously presented) The method of claim 28, wherein said step of selectively removing said SiGe layer comprises chemical oxidation.
- 40. (Previously presented) The method of claim 28, wherein said step of selectively removing said SiGe layer is performed on a first region of said SiGe layer and not on a second region of said SiGe layer.
- 41. (Previously presented) The method of claim 40, wherein said method further comprises forming a MOSFET in said first region.
- 42. (Previously presented) The method of claim 41, wherein said MOSFET comprises a high-k dielectric.
- 43. (Previously presented) The method of claim 40, wherein said method further comprises forming a MOSFET in said second region.
- 44. (Previously presented) The method of claim 43, wherein said MOSFET comprises a high-k dielectric.
- 45. (Currently amended) The method of claim 40, wherein said method further comprises: forming a surface channel device having a first channel in said first region; and forming a buried channel device having a second channel in said second region, wherein the strained semiconductor layer comprises said first channel and said second channel.
- 46. (Previously presented) A method of manufacturing a semiconductor device, comprising: providing a strained semiconductor layer; providing a SiGe layer over said strained semiconductor layer; selectively removing said SiGe layer to expose said strained semiconductor layer; providing a gate dielectric over said strained semiconductor layer; providing a source region in a first region of said strained semiconductor layer; providing a drain region in a second region of said strained semiconductor layer; and providing a gate contact disposed above said gate dielectric and between said source and drain regions.

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- 47. (Previously presented) The method of claim 46, wherein said source region and said drain region are p-type doped.
- 48. (Previously presented) The structure of claim 46, wherein said source region and said drain region are n-type doped.
- 49. (Previously presented) The method of claim 46, wherein said strained semiconductor layer comprises Si, Ge, or GaAs.
- 50. (Previously presented) The method of claim 46, further comprising, before the step of providing a strained semiconductor layer, providing a relaxed semiconductor layer beneath said strained semiconductor layer.
- 51. (Previously presented) The method of claim 50, wherein said relaxed semiconductor layer comprises Si or Ge.
- 52. (Previously presented) The method of claim 46, wherein said strained semiconductor layer is disposed over a semiconductor substrate.
- 53. (Previously presented) The method of claim 52, wherein said semiconductor substrate comprises Si.
- 54. (Previously presented) The method of claim 52 wherein said semiconductor substrate comprises an insulator layer.
- 55. (Previously presented) The method of claim 52 wherein said gate dielectric comprises a high-k dielectric.